

27 FEB 1988

ENG/BCE

MEMORANDUM FOR RECORD

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86004 - Encapsulate Hangar Insulation

1. A meeting was held on 23 February 88 at the 154 CES training room. In attendance were:

Lt Col Roberto Martinez-Perez, 15 ABW/SGPB
Lt Col Kenneth Wicks, 154 COMPG/SE
Capt Alvin Satogata, HIENG/BCE
1Lt Brian Blazicko, 15 ABW/SGPB
CMSgt David Pontes, 154 CAMS
MSgt Douglas Abe, 154 CAMS
Mr. Dwight Okawa, M&E Pacific
Mr. Sam Casalina, Casalina Assoc., Inc.
Mr. Richard Cheski, AES, Inc.

2. The subject project, encapsulation of the asbestos in bldg 3400 was discussed. A brief list of items covered follows:

a. The encapsulation cost estimate is roughly \$500,000. The removal with substitute fire-retardant is estimated at 1.25 million dollars.

b. The following are concerns for the insulation--facility experiences open-air tradewinds because hangar doors are normally in the open position. The mechanical vibrations on the roof and structural beams due to winds. The weight of the encapsulant once the insulation is sprayed on. The major concern, the humidity. How the penetrating sealant and encapsulant sealant holds up under our concerned conditions needs to be addressed.

c. It was mentioned that the asbestos content (3-6 % of chrysotile) of the encapsulant is not considered hazardous. The various air sampling tests show minimal readings. Technically, we are doing everything we can legally and covered/required by law.

d. The penetrating sealant has sodium silicate in the solution which is not present in the retardant. This can be microscopically seen in a core sample taken during construction. This rationale will be used in quality control of the project. We also discussed the contractor surveillance/quality control for the project. We are recommending an independent consultant to act as the government representative for construction inspection.

e. The sample 'I' beam was treated with the BWE-3000 penetrating encapsulant. The white encapsulant is not the recommended material. Also, the thickness we are designing for is 1/3 of that. Let me mention here that it is a laboratory produced mock-up.

f. Concern was brought out on the roof panels - where you cannot fully encapsulate the insulation. The random core samples will verify the sealant is being applied according to specifications. Also included in the contract will be the contractor to verify the condition of

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t. Insulation, prior to treating it. Nevertheless, the supplier stipulates that in the event the insulation does fall, that the particles would still be bonded together as long as sealant penetrates the insulation as specified. There would be minimal fibers in the air.

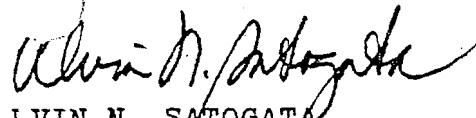
g. Lt Col Martinez-Perez concern (as an individual) is that the best treatment is removal. He understands that although cost may be 3 times as great, that removal eliminates the problem. He mentioned that he is aware of the non-hazardous condition of the insulation but that the removal would eliminate the problem. It was also mentioned that lot of removal projects require the contractor to seal the surfaces exposed from the removal with similar encapsulant material. We all realized that ANGSC/DEM would decide on encapsulation or removal.

h. Fire retardant requirement - the hangar is approximately 5 minutes away from the base fire department. We have a foam **system** interconnected with the hangar doors and via the base Fire Chief, some system of **fire retardant** on the ceiling is necessary.

5. Open Items:

a. Need to address the timetable of the project: Do **we** do the work before the ORI/MEI scheduled possibly in FY89/1 or wait till that is completed.

b. Contact ANGSC/DEM, Mr. Manse Brousseau and **have** him discuss the project with Mr. Richard Cheski, AES, Inc.



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